

## REMARKS

Claims 1-28 and 30-35 are pending in this application. In the January 12, 2007, final Office Action, the Examiner withdrew the rejection of 1-28 and 30-35 under 112/1<sup>st</sup> paragraph, but has maintained the rejection of (finally rejected) claims 6-11, 13, 17, 19-22, 25-28, 31, 32, 34 and 35 under 35 U.S.C. 103 as unpatentable over U.S. Patent 6,233, 565 to Lewis, et al. (Lewis) in view of U.S. Patent 6,976,162 to Ellison, et al. (Ellison), and further in view of U.S. Patent 5,604,805 to Brands (“**Set I**” of the 103(a) rejections that identify Lewis as the primary 103(a) reference).

The Examiner also finally rejects claims 1-5, 23, 24, 30 and 33 under Section 103(a) over Lewis, in combination with Muftic, and that combination combined with Ellison (“**Set II**” of the 103(a) rejections that identify Lewis as the primary 103(a) reference). The Examiner finally rejects claims 12, 14-16 and 18 under Section 103(a) as unpatentable over Lewis in combination with Ellison, where that combination is combined with Muftic (“**Set III**” of the 103(a) rejections that identify Lewis as the primary 103(a) reference).

The Examiner responds to applicant’s arguments in the November 15, 2006, Amendment by: 1.) asserting that same arguments only distinguish the references individually from the claimed invention, and that: “one cannot show nonobviousness by attacking references individually where he rejections are based on combinations of references,” and 2) that Applicants remarks at page 13, par. 6 is merely a bald assertion against the by-three and by-four art combinations. The Examiner cites In re Keller, 208 USPQ 871 (CCPA 1981), and In re Merck & Co., 231 USPQ 375 (Fed. Cir. 1986).

Applicants respectfully disagree that Applicant’s November 15, 2006, Amendment only distinguishes the references individually, and that applicant’s argument therein are merely bald assertions.

That is, applicant’s November 15, 2006, Amendment, at page 12, first full paragraph, explains that Lewis, the primary reference, fails to disclose, teach or suggest obtaining and verifying authenticity of a receipt using two different public-private signature key pairs in the manner described in the Specification. At the last par. of page 12 of applicant’s November 15, 2006 Amendment (“the November 15 Amendment”), and at the first full paragraph of page 13, applicant explains and distinguishes Lewis from the rejected claims. The next three

paragraphs of the November 15 Amendment describe why Ellison, Muftic and Brands fail to remedy the shortcomings of Lewis with respect to the stated rejection, whether individually or in combination.

Applicant disagrees with the Examiner's characterization of her argument because such characterization did not articulate applicant's complete argument presented to overcome the rejections, but only part of her argument. That is, applicant's complete argument was presented to make clear that the Section 103 rejections by Lewis combined with Ellison, and that combination with Brands, focused upon whether Lewis discloses, teaches or suggests obtaining and verifying authenticity of a receipt using two different public-private signature key pairs in the manner described. Applicant again reiterates that Lewis does not disclose, teach or suggest obtaining and verifying authenticity of a receipt using two different public-private signature key pairs, and that combining Lewis with the other references does not remedy Lewis' shortcomings vis-à-vis the Section 103(a) final rejections.

Herein, applicant augments and clarifies those arguments presented on November 15, 2006, and applies the augmented and clarified arguments in an effort to overcome each of the three aforementioned sets of Section 103(a) rejections (based on Lewis as the primary reference) asserted in the outstanding final Office Action.

Broadly, and as explained in detail in applicant's Specification, the present invention provides for issuing and verifying ownership of electronic receipts while maintaining the owner of the receipt anonymous or pseudonymous. In one aspect of the invention, a message is received by a sender that was electronically signed by the sender using a first private-public key pair. The message includes a receipt electronically signed by an issuer using a second private-public key pair. The issuer issues the receipt using the second private-public signature key pair. This receipt is sent to a holder, which might be, but is not necessarily, the owner, using a second private-public key pair. The second pair of public/private signature keys is used to verify ownership of the receipt, where the receipt is signed using this second private signature key, and then sent. Verification by decryption is carried out by a receiver of the receipt using the second public signature key, which verifies ownership of the receipt if the receiver is the owner.

The use of the two pairs of public/private signature key pairs allows the receipt to be issued and verified, while maintaining the owner of the receipt pseudonymous or anonymous.

The prior art does not disclose or suggest this use of two pairs of private/public signature keys in this way. This feature is of utility because, as discussed in the present application, it enables e-commerce to be transacted in a way that enables a person to verify ownership of a receipt while, at the same time, preserving that person's anonymity or pseudonymity.

### **Set I**

Applicant responds to the rejection of claims 6-11, 13, 17, 19-22, 25-28, 31, 32, 34 and 35 under 35 U.S.C. 103 as unpatentable over Lewis in view of Ellison, and further in view of Brand as follows. That is, and more particularly with respect to independent claims 6, 13, 24, 25 and 26, applicants assert that there is no teaching or suggestion found in any of Lewis, Ellison or Brand that would suggest a reason for making such a by-three combination, and, *assuming arguendo* that there is some suggestion to combine that could render such combination proper, the combination would still not render obvious the rejected independent claims. No combination of Lewis, Ellison and Brands is found to include each of the elements of the rejected claims, so the rejection cannot stand.

Lewis is the primary reference relied on by the Examiner to reject the claims. Lewis describes procedures for issuing receipts over the Internet. The Lewis system includes that goods or services are purchased by a user over the Internet from a server having a receipt generation module. Special transaction software is used to manage the printing of various communications. The procedure disclosed in Lewis is relatively standard in many respects, except that it is done using the Internet. Importantly, Lewis does not disclose any specific mechanism to keep the owner anonymous or pseudonymous. That is, Lewis does not mention, teach or suggest using first and second private-public key pairs to practice the invention disclosed therein.

As the Examiner has recognized, there are a number of important features of the preferred embodiment of the invention that are not shown in or suggested by Lewis. In order to remedy this deficiency of Lewis as a reference, and hold the claims rejected under 35 USC 103(a), the Examiner relies on the additional references, including Mufic, Ellison and Brand (independent claims 1 and 24), and including Ellison and Brand (independent claims 6, 13, 24, 25 and 26). None of these other references overcome Lewis' shortcomings.

Ellison merely describes a procedure for issuing a pseudonym to protect the identity of a platform and its use. Once the platform receives this pseudonym, subsequent communications can be performed using the pseudonym to help keep the real identity of the platform anonymous. Ellison does not mention, teach or suggest using a first and a second private-public key pair to practice the invention disclosed therein.

Muftic was cited in the Office Action for its disclosure of a method and system for performing secure electronic commerce. In the Muftic method and system disclosed, procedures are used to authenticate signed messages. It is important to note that this reference is directed primarily to authentication rather than to confidentiality. Muftic does not mention, teach or suggest using first and second private-public key pairs to practice the invention disclosed therein.

Brands describes use of a restrictive blind signature protocol in combination with a testing protocol in order that certified information may be transferred in a “blinded” way, to ensure untraceability. Brands does not mention, teach or suggest using first and second private-public key pairs to practice the invention disclosed therein.

Applicant respectfully asserts, therefore, that Lewis combined with Ellison and Brands, whether alone or in combination, does not teach or suggest how to issue and to verify ownership of a receipt while maintaining the owner anonymous or pseudonymous, still less using first and second private-public signature key pairs, where a user and receipt issuer exchange information using the first private-public key pair, and the receipt issuer and owner communicate using the second private-public key pair, which are limitations set forth in each of applicant’s independent claims.

Because of the above-discussed differences between independent claims 6, 13, 25 and 26, and because of the advantages associated with those differences, these claims patentably distinguish over the prior art and are allowable. Claims 7-11 and 31 depend from claim 6 and are patentable therefore; claims 17, 19-22, 28 and 32 depend from claim 13, and patentable therefore; claim 34 is patentable in view of its dependency from claim 25, and claim 35 by its dependency from claim 26. The Examiner is therefore respectfully asked to reconsider and to withdraw the above-identified rejections of claims 6-11, 13, 17, 19-22, 25-28, 31, 32, 34 and 35 by the Lewis/Ellison/Brands combination, and to allow these claims.

## **Set II**

Applicant responds to the rejection of claims 1-5, 23, 24, 30 and 33 under 35 U.S.C. 103 as unpatentable over Lewis in view of Muftic, and further in view of Ellison as follows. That is, with respect to the rejection of independent claims 1 and 24, applicant asserts that there is no teaching or suggestion found in any of Lewis, Muftic or Ellison to suggest making such a by-three combination, and *assuming arguendo* that some suggestion to combine could be found in the references to render such combination proper, the combination would still not render obvious the rejected independent claims. That is, no combination of Lewis, Muftic and Ellison is found to include each of the elements of the rejected claims, so therefore the rejection cannot stand.

Lewis, which is the primary reference relied on by the Examiner to reject the claims, describes procedures for issuing receipts over the Internet. Lewis is relatively standard in many respects, except that it is done using the Internet. But as mentioned, Lewis does not disclose any specific mechanism to keep the owner anonymous or pseudonymous, nor teach or suggest using first and second private-public key pairs to practice the invention disclosed therein.

Muftic and Ellison are described above in the SET I response.

Applicant respectfully asserts, therefore, that Lewis combined with Muftic and Ellison, whether alone or in combination, does not disclose how to issue and verify ownership of a receipt while maintaining the owner anonymous or pseudonymous, still less using first and second private-public signature key pairs, where a user and receipt issuer exchange information using the first private-public key pair, and the receipt issuer and owner communicate using the second private-public key pair, as set forth in each of applicant's independent claims.

Because of the above-discussed differences between independent claims 1 and 24, and because of the advantages associated with those differences, these claims patentably distinguish over the prior art and are allowable. Claims 2-5, 23 and 30 are dependent from claim 1 and are allowable therewith; and claim 33 is dependent from claim 24 and patentable therewith. The Examiner is therefore respectfully asked to reconsider and to withdraw the above-identified final rejections of claims 1-5, 23, 24, 30 and 33 by the Lewis/Muftic/Elison combination, and to allow these claims.

### Set III

Applicant responds to the rejection of dependent claims 12, 14-16 and 18 under 35 U.S.C. 103 as unpatentable over Lewis in view of Ellison, further in view of Brands, and still further in view of Muftic, as follows. That is, with respect to rejected dependent claims 12, 14, 15, 16 and 18, applicant asserts that there is no teaching or suggestion found in any of Lewis, Ellison, Brand or Muftic that would suggest a reason for making such a by-four combination, and even *assuming arguendo* that there is some suggestion to combine to render such a by-four combination proper under Section 103, such by-four combination would still not render obvious the rejected claims. That is, no combination of Lewis, Ellison, Brands and Muftic is found to include each of the elements of the rejected claims, so the rejection cannot stand.

Lewis, which is the primary reference relied on by the Examiner to reject the claims, describes procedures for issuing receipts over the Internet. But Lewis does not disclose any specific mechanism to keep the owner anonymous or pseudonymous, nor does Lewis disclose teach or suggest using first and second private-public key pairs to practice the invention disclosed therein.

Muftic, Brands and Ellison are described above in the SET I response, and do not remedy Lewis's shortcomings regarding the Examiner's stated final rejections.

Applicant respectfully asserts, therefore, that Lewis combined with Muftic, Brands and Ellison, whether alone or in combination, does not teach or suggest how to issue and to verify ownership of a receipt while maintaining the owner anonymous or pseudonymous, still less using first and second private-public signature key pairs, where a user and receipt issuer exchange information using the first private-public key pair, and the receipt issuer and owner communicate using the second private-public key pair, which are limitations set forth in each of applicant's independent claims.

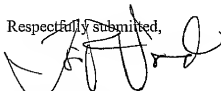
Because of the above-discussed differences between dependent claims 12, 14-16 and 18, because of the advantages associated with those differences, and in view of the arguments for patentability under Section 103 for patentability of the claims from which rejected claims 12 and 14-16 depend, the claims patentably distinguish over the prior art and are allowable. The Examiner is therefore respectfully asked to reconsider and to withdraw the above-

identified rejections of claims 12, 14-16 and 18 by the Lewis/Ellison/Brands/Muftic combination, and to allow these claims.

Applicant respectfully submits that, for the reasons discussed above, that each of pending claims 1-28 and 30-35 patentably distinguish over the prior art and are allowable, and requests that the Examiner withdraw the rejection of claims 1-28 and 30-35 under 35 U.S.C. 103, and to allow these claims.

If the Examiner believes that a telephone conference with applicant's attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'John F. Vodopia', written over the typed name.

John F. Vodopia  
Registration No. 36,299  
Attorney for Applicant

SCULLY, SCOTT, MURPHY & PRESSER, P.C.  
400 Garden City Plaza, Suite 300  
Garden City, New York 11530  
(516) 742-4343

JFV:gc